Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (cancelled)

Claim 7 (currently amended): A method for auto-exposure control, comprising:
~~determining a presence of artificial illumination in the scene;~~
determining a frequency of intensity variations in ~~the~~ a scene by measuring contrast variations in the scene;
determining that the scene is illuminated with an artificial illuminant if the contrast variations in the scene exceed a predetermined value;
~~synchronizing an exposure rate with the frequency of intensity variations in the scene;~~
taking at least one exposure of the scene commencing at a preselected phase in the contrast variations ~~the synchronized exposure rate~~; and
determining at least one exposure parameter for the scene using the at least one exposure.

Claim 8 (currently amended): The method of claim 7, wherein ~~where~~ the ~~presence and~~ frequency of intensity variations of the artificial illumination is determined by user input.

Claim 9 (currently amended): The method of claim 7, wherein ~~where~~ the presence ~~and frequency~~ of ~~the~~ artificial illumination is determined by measuring the light from the scene for periodic changes.

Claim 10 (currently amended): The method of claim 9, wherein ~~where~~ the periodic changes are variations in brightness.

Claim 11 (cancelled)

Claim 12 (currently amended): The method of claim 7, wherein ~~where~~ the frequency intensity variations of the artificial illuminant ~~illumination~~ is determined by the geographic location of the scene.

Claim 13 (currently amended): The method of claim 7, wherein ~~where~~ the exposure parameter comprises an exposure length.

Claim 14 (currently amended): The method of claim 7, wherein ~~where~~ the exposure parameter comprises [[a]] gain [[factor]].

Claim 15 (currently amended): The method of claim 7, wherein ~~where~~ the exposure parameter comprises an aperture size.

Claim 16 (currently amended): The method of claim 7 further comprising [[:]] taking a final exposure, using the exposure setting, at the synchronized exposure rate.

Claim 17 (currently amended): The method of claim 7 further comprising [[:]] taking a final exposure, using the exposure setting, ~~where~~ wherein the final exposure is centered at the cross-over point in the intensity variations.

Claim 18 (currently amended): A method for auto-exposure control, comprising:
        predicting at least one frequency for a variation in the illumination in the scene;
        measuring light from the scene at a periodic rate, ~~where~~ wherein the periodic rate is different than any of the predicted frequencies, using an exposure length that is different than any of the periods of the predicted frequencies;

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detecting the presence of an artificial illuminant when the measured light from the scene contains periodic changes;

determining the phase and frequency of the periodic changes with ~~FFT~~ fast Fourier transform analysis of the ~~sampled~~ measured light;

synchronizing an exposure time ~~rate~~ with a phase angle associated with the frequency of the intensity variations in the scene;

taking at least one exposure of the scene at the synchronized exposure time ~~rate~~, the at least one exposure having an exposure length;

determining at least one exposure parameter for the scene using the at least one exposure.

Claim 19 (currently amended): The method of claim 18, wherein ~~where~~ the exposure length is centered at a crossover point in the intensity variations.

Claim 20 (currently amended): The method of claim 19, wherein ~~where~~ a final exposure is taken, using the exposure parameter, and the final exposure is centered on a crossover point in the intensity variations.

Claim 21 (original): A method for auto exposure control, comprising:

predicting a frequency for a variation in the illumination in the scene;

measuring light from the scene at a periodic rate using a first exposure length that is equal to the period of the predicted frequency;

re-measuring light from the scene at a periodic rate using a second exposure length that is equal to the period of a second predicted frequency;

determining the presence and frequency of the variation in the illumination in the scene when the variability of the measurements using the first exposure length is different than the variability of the measurements using the second exposure length;

synchronizing an exposure rate with the frequency of the intensity variations in the scene;

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taking at least one exposure of the scene at the synchronized exposure rate, the at least one exposure having an exposure length;

determining at least one exposure parameter for the scene using the at least one exposure.

Claim 22 (currently amended): An apparatus for auto-exposing a scene comprising:

a means for measuring light from the scene at a periodic rate using a predetermined exposure time;

a means for determining the presence and frequency of intensity variations of an artificial illuminant in the scene by examining the measured light from the scene for periodic intensity variations;

a means for determining exposure parameters for the scene synchronized with the frequency of intensity variations.

Claim 23 (original): A digital camera comprising:

a photo sensor array, the photo sensor array configured to measure light from a scene at a periodic frequency using a predetermined exposure length;

a lens configured to focus the light from the scene onto the photo sensor array;

a processor, the processor configured to determine the frequency of intensity variations in the illumination of the scene by examining the measured light from the scene for periodic contrast variations, the processor also configured to synchronize at least one exposure, used in an auto-exposure control, to the intensity variations in the scene.

Claim 24 (currently amended): The digital camera of claim 23, wherein where a final exposure is taken synchronized to the intensity variations in the scene.

Claim 25 (currently amended): A method for auto-exposure control during capture of a scene by an imaging device, said method [[,]] comprising:

determining a presence of artificial illumination in the scene;

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determining a period of intensity variations in the <u>artificial illumination</u> [[scene]];

setting an exposure length equal to an integer multiple of the period of the intensity variations in the scene;

taking at least one <u>first</u> exposure of the scene using the exposure length;

determining at least one exposure parameter for the scene using the at least one <u>first</u> exposure [[.]] <u>; and</u>

<u>taking a second exposure using the exposure parameter, wherein the second exposure is centered at a cross-over point in the intensity variations.</u>

Claim 26 (currently amended): The method of claim 25<u>, wherein</u> ~~where~~ the presence and period of the <u>intensity variations are</u> ~~artificial illumination is~~ determined by user input.

Claim 27 (currently amended): The method of claim 25<u>, wherein</u> ~~where~~ the presence and period of the <u>intensity variations are</u> ~~artificial illumination is~~ determined by measuring the light from the scene for periodic variations.

Claim 28 (currently amended): The method of claim 27<u>, wherein,</u> ~~where~~ the <u>intensity variations</u> ~~periodic changes~~ are variations in brightness.

Claim 29 (currently amended): The method of claim 27<u>, wherein</u> ~~where the light from the scene is focused onto a photo sensor and~~ the <u>intensity variations</u> ~~periodic changes~~ are variations in contrast.

Claim 30 (currently amended): The method of claim 25<u>, wherein</u> ~~where~~ the period of the artificial illumination is determined by the geographical location of the scene.

Claim 31 (currently amended): The method of claim 25<u>, wherein</u> ~~where~~ the exposure parameter comprises an exposure length.

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Claim 32 (currently amended): The method of claim 25, wherein where the exposure parameter comprises a gain factor.

Claim 33 (currently amended): The method of claim 25, wherein where the exposure parameter comprises an aperture size.

Claim 34 (currently amended): The method of claim 25 further comprising [[:]] taking a final exposure [[.]] using the exposure parameter setting and using the exposure length.

Claim 35 (cancelled)

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